

PROJECT 10073 RECORD

1. DATE - TIME GROUP 21 September 50 21/1450Z		2. LOCATION XXXXXXXXXXXX Provincetown, Mass.	
3. SOURCE Civilian		10. CONCLUSION UNIDENTIFIED Case is carried as Unidentified.	
4. NUMBER OF OBJECTS One			
5. LENGTH OF OBSERVATION 9 Minutes		11. BRIEF SUMMARY AND ANALYSIS See Case File.	
6. TYPE OF OBSERVATION Ground-Radar			
7. COURSE Varied			
8. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
9. PHYSICAL EVIDENCE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			

FORM
FTD SEP 63 0-329 (TDE) Previous editions of this form may be used.

UNCLASSIFIED

C304

HEADQUARTERS
SIGNAL CORPS ENGINEERING LABORATORIES
FORT MONMOUTH, NEW JERSEY

REFER TO: SIGEL-RMB-5
Project 172B

ADDRESS REPLY TO:

Commanding General

SUBJECT: Report of Flying Saucer Sighting


21 NOV 52

TO: Chief, Engineering and Technical Division
Office of the Chief Signal Officer
Department of the Army
Washington 25, D. C.
Attention: SIGGG-M

The attached report obtained from the Massachusetts Institute of Technology Weather Radar Research Group under Contract DA-36-039 sc-32038 with the Signal Corps Engineering Laboratories, is forwarded for your information and possible transmission to interested parties within the U. S. Air Force. Massachusetts Institute of Technology Weather Radar Research Group has been requested to treat this matter as "Restricted, Security Information" in accordance with AR 380-5. It is understood that this communication constitutes the first formal report on this occurrence.

1/2 Incl.

1. Cy of ltr fm MIT
dtd 6 Oct '52
2. MIT map dtd 21
Sep '50, 0950E


EDWIN R. PETZING
Brigadier General, USA
Commanding

UNCLASSIFIED

Weather Radar Research
Massachusetts Institute of Technology
Department of Meteorology

UNCLASSIFIED

Room 24-520

3-6784

October 6, 1952

Director
Evans Signal Laboratory, SCEL
Belmar, New Jersey

Attention: Mr. William B. Gould
Meteorological Branch, Sferics Section

Dear Mr. Gould:

We have finally discovered our records covering the "Flying Saucer" incident of 21 September 1950. The incident came about in the following way:

We had arranged informally with the Air Weather Service group at Otis Field on Cape Cod to track a pair of jet aircraft (F-84's I believe) at 35,000 ft. in order to provide them with an estimate of their wind drift, and consequently winds aloft at that altitude. I have never understood why the group at Otis Field wanted us to do this, and don't in general approve of using our radar systems for operations completely disconnected with our regular line of work. This instance is, I believe, the only time we have had any such arrangement with a group at Otis Field.

We had established radio communications with the jet aircraft on our VHF. The first radar contact was made with the SCR-615-B at 45-mile range and 285° azimuth. As the accompanying plot shows, the F-84's were flying a straight and level course at 250 MPH indicated air speed towards the northwest (333°). About three minutes after radar contact, we noticed another aircraft signal which appeared to be flying a closing course with the F-84's. We notified the F-84 pilots by radio to watch out for the other aircraft which was closing on them from their left. At 4.0 minutes (all times being figured from the first radar contact) the two signals nearly merged, the "Saucer" crossing the track of the F-84's about three miles ahead of them; but the pilots of the F-84's reported that they were unable to see any aircraft. They further explained that there was a haze level below them and some light haze above, so that the visibility near their flight level may have been quite poor. The other aircraft did a very sharp turn of nearly 270° and again approached the F-84's on an intercepting course and closed with them, as far as we could tell by radar, at 5.0 minutes. Again the F-84 pilots were unable to see any other aircraft. The "Flying Saucer" then carried on straight towards Cambridge; but our radar operators, in attempting to track both the F-84's and the "Saucer" lost track of the "Saucer", continuing to plot the F-84's up to 9 minutes as indicated.

The signal strength from the two F-84's in close formation was approximately two-thirds saturation. The signal from the "Saucer" was saturated.

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SECURITY INFORMATION

NO FORN DISSEM

UNCLASSIFIED

- 2 -

TO: Director, Evans Signal Laboratory, SCEL

10/6/52

Our best estimate of the speed of the "Saucer" was 22 miles per minute. For approximately half of this one minute during which we were tracking it, it was engaged in its sharp turn. The acceleration in this turn comes out to be 11 or 12 G as well as we can figure it.

Later on that same day (21 September 1950) we received a telephone call from the Weather Officer at Otis Field (Major Tuttle) inquiring about our observations. After a brief conversation he asked us to treat the matter as "confidential" as far as any general publicity was concerned. The following day we had a visit from two men (from the Boston Office of Special Investigations, I believe) and we described to them what we observed essentially as it is described above. We have not reported this observation to any other group up to this date.

Very truly yours,
WEATHER RADAR RESEARCH

UNCLASSIFIED

~~SECURITY INFORMATION~~
~~CONFIDENTIAL~~

DISPOSITION FORM

735
SECURITY CLASSIFICATION (If any)

UNCLASSIFIED

~~RESTRICTED~~
~~SECURITY INFORMATION~~

FILE NO.

SIGGG-M-1

SUBJECT

Report of Flying Saucer Sighting

TO

Commanding Officer
Signal Corps Intelligence Agency
Room 3052, Main Navy Bldg.,
Washington, D. C.

FROM

CSigO

DATE

28 Nov 1952

COMMENT NO. 1

Whedon/73909

1. The attached report is forwarded for your information and for forwarding to Air Force Intelligence Agency.

2. It is understood that the Air Force treats information of this type with a high classification. If it is desired that M. I. T., under Signal Corps contract, consider this information as higher than Restricted Security Information, this office should be advised in order that appropriate directives may be prepared.

FOR THE CHIEF, ENGINEERING AND TECHNICAL DIVISION:

G. D. DEAN

Capt, Signal Corps

for G Dean
LUTHER E. JOHNSON, Lt Col, SigC
Chief, Special Projects Branch

1 Incl:

Ltr fm Hq, SCEL,
21 Nov 52, w/2 Incl

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~~RESTRICTED~~
~~SECURITY INFORMATION~~

21 SEPT 50

UNCLASSIFIED

1653.00
34

SIGIA-1C (28 Nov 52)

SUBJECT: Report of Flying Saucer Sighting

THRU: AFOIN-2A2

FROM: SCIA

DATE:

17 DEC 1952

Comment No. 2
Stilmar/66158/t1

Pentagon Annex 3


TO: Air Technical
Intelligence Center
Wright Field, Ohio

1. Forwarded

2. Characteristics of the SCR-615-B radar set (frequency range 2750-2850 mc) are tabulated on page 404 of ATIC report Electromagnetic Radiation Data (No. TR-EL-20-2).

3. Your advice is requested as to issue raised in paragraph 2 of Comment No. 1.

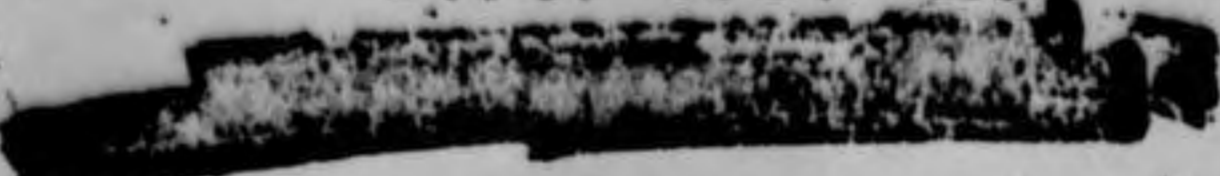
1 Incl. ✓
n/c


JOHN V. MILLS, Colonel, Sig C
Commanding

UNCLASSIFIED

Incl #3

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Ltr, DO #1, File No. 1D-OSI 24-0, dated 5 Oct 50, Spot
Intelligence Rpt, subj: Unconventional Aircraft

2 Incls:

AMC Routing and Red Sheet

subj: Sighting of Unidentified Airborne Object

(1 cy)

Rpt of Sighting of Unidentified Airborne Object

by JOSEPH V. CONNELLY

(1 cy)

UNCLASSIFIED

21 Sept.

UNCLASSIFIED RSB/RMJ/dm

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1001 2130

1R
J (2nd)

AF234896

1D-OSI 24-0-175

5 October 1950

SPOT INTELLIGENCE REPORT

SUBJECT: Unconventional Aircraft

TO: Director of Special Investigations
Headquarters USAF
Washington 25, D. C.

1. SYNOPSIS: Unconventional aircraft reported sighted by Mass. Institute of Technology radar observer on 21 September 1950 between Provincetown, Mass., and The Isle of Shoals. (Evaluation F-2)

2. DETAILS: On 29 September 1950, Mr. [REDACTED] Research Associate, "Weather Radar Project" (U.S. Signal Corps Contract), Mass. Institute of Technology, advised this District that while tracking F-86 aircraft by means of radar, that an unidentified object was also tracked on the radar screen at approximately 0945 hours, 21 September 1950. In view of the apparent qualifications of [REDACTED] as an observer, it was deemed advisable to interview [REDACTED] and two other witnesses to obtain firsthand information as to the sighting. Report of interview conducted on 3 October 1950 by S/A THOMAS R. YANDOH is attached as inclosure #1. Inclosure #2 was provided by [REDACTED] to S/A YANDOH. It was delivered to YANDOH by JOSEPH V. CONNELLY by whom written. In view of technical detail contained in inclosures #1 and #2, it is not considered necessary to summarize such information in this paragraph.

3. ACTION: In accordance with AFCSI Letter #85, dated 8 Feb 50, no further investigation is being conducted by this District Office.

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

R. S. BOWER
Colonel, USAF
District Commander



[REDACTED]

ROUTING AND RECORD SHEET

AIR

ERIEL COMMAND

Use this form for inter-office correspondence within headquarters.

Use authorized office symbols and addresser and addressee.

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Enter initials of dictator and typist, telephone number and location to right of signature.

Number all comments consecutively.

Note warning signal at lower left of form. Remaining space is sufficient only for proper spacing of typewritten signature.

Separate comments by horizontal lines across page.

SUBJECT Sighting of Unidentified Airborne Object

1D-OSI 24-

TO District Commander
1st District OSI (IG) USAF
Westover AFB, Mass.

FROM Detachment Commander
Detachment "B", 1st District OSI (IG)
Rm. 826, 55 Tremont Street
Boston, Mass.

DATE 3 October 50 COMMENT NO. 1

1. [REDACTED] Research Associate, Massachusetts Institute of Technology, Cambridge, Mass., was interviewed 2 October 1950 concerning his reported sighting of an unidentified airborne object on 21 September 1950. He has been with Massachusetts Institute of Technology as a Research Associate since 1946. [REDACTED] also holds the position of Staff Weather Officer with the 67th Fighter Wing, Massachusetts Air National Guard, and has worked with radar since 1943. His rank with the Air National Guard is that of Major and his serial number is [REDACTED].

2. The following is an extract of a letter written by [REDACTED] on 27 September 1950 to a Major TUTTLE, Staff Weather Officer, 33rd Fighter Wing, Otis Air Force Base, Mass:

"An exceedingly puzzling event occurred during the 3rd run when the planes were heading northwest at 30,000 feet. (see attached sketch). We picked up another plane (?) in the radar beam traveling about due north on a converging course toward the F 86's. It was moving very rapidly and I told the pilots about it, its range and direction from them. The echo caught up with, passed, and then crossed the course of the 86's, suddenly went into a very tight (for the speed) turn to the right, headed back toward Boston and passed directly over our flight. (perhaps went under). The sketch represents as closely as we can remember, the relative positions of the two planes. Two other observers were with me at the time and we have checked over the facts rather closely. The pilots will undoubtedly recall the incident. They said they didn't see anything which is not too surprising considering the speed of the object and the fact that it may have passed several thousand feet above or below them and still looked like coincidence to the radar. Figuring conservatively, the speed of the object was approximately 1200 mph, and the centrifugal force exerted on the ship during the turn amounted to something more than five g's. It gave an excellent radar echo which could not be mistaken for anything else and in all respects except for the velocity, seemed a normal radar target. It passed out of the beam while we continued to track our flight, but we focussed on it again for a few seconds shortly after and it was rapidly approaching Boston. We went back to the 86's since we hesitated to leave them for too long, but now I wish we had taken some accurate velocity measurements when we had the

UNITED STATES AIR FORCE
THE INSPECTOR GENERAL
4 OCT 1950
OFFICE OF SPECIAL INVESTIGATION

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AF23489C

ROUTING AND RECOMMENDATION SHEET UNCLASSIFIED AIR SERIEL COMMAND

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Number all comments consecutively.

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Use entire width of sheet, both sides.

SUBJECT Sighting of Unidentified Airborne Object

1D-OSI 24-

TO District Commander
1st District OSI (IG)

FROM Detachment Commander
Detachment "B"

DATE 3 Oct 50

COMMENT NO. 1
(Cont'd)

"chance and taken the risk of losing the flight.

"The whole thing doesn't seem to make sense as you will discover when you reflect a moment about it. It was very evidently an interception of some sort on our flight, but what? The turn was utterly fantastic, I don't think the human frame could absorb it, but if the object was radio controlled, it had no particular business flying on such courses on planes occupied on legitimate business. A few rough calculations concerning control surfaces, angles, etc. only adds to the puzzle that this object must have been entirely unconventional in many and basic respects. Perhaps the thing that bothers me the most is that it gave a very good radar echo, which implies irregular surfaces and comparatively large size, large enough so the pilots might have had a good chance to see it.

"It seems highly probable that I may be poking into something that is none of my business, but on the other hand, it may be something that the Air Force would like to know about if it doesn't already. I wish you would take the matter up with your intelligence officer or C.O. and get their reactions. The whole thing has us going nuts here and we don't know whether to talk about it or keep our mouths shut. Until I hear from you we will do the latter.

"Perhaps we could run another mission for the purpose of luring it out again and this time track it, or at least get your pilots close enough for a look- they'd never catch it I'm sure.

"There are many more little details which I haven't bothered to include concerning this--mostly scope indications and such.

"Please let me hear from you soon.

Regards,

reported that he later discussed this matter with TUTTLE by telephone and TUTTLE advised him that the matter was to be considered confidential and that in all probability someone from Otis Air Force Base would contact him concerning it. To date, he has not been approached by anyone from the 33rd Fighter Wing. advised further that the information has not been released to the newspapers.

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SUBJECT Sighting of Unidentified Airborne Obj

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1D-OSI 24-

TO District Commander
1st District OSI (IG)

FROM Detachment Commander
Detachment "B"

DATE 3 Oct 50

COMMENT NO. 1
(Cont'd)

3. [redacted] advised that the mission referred to in the extract set forth above consisted of two F-86 aircraft flying between Provincetown, Mass., north, to the Isle of Shoals. These aircraft were tracked and guided by [redacted] and two associates who were operating an SCR 615-B Signal Corps Radar Unit at Bldg. 24 on the Massachusetts Institute of Technology campus. The purpose of this mission was to attempt to establish wind velocity and was done as a personal favor for TUTTLE. [redacted] estimated the speed of the object sighted on both the 'R Scope' and the 'PPI Scope' at approximately 1320 miles per hour. The object was sighted at 0952 Eastern Standard Time at an altitude that could only be estimated to be between 25,000 and 30,000 feet or 30,000 and 35,000 feet. The two F-86's were flying at 30,000 feet, and it could not be determined on the radar screen whether the object was above or below the flight of F-86's. [redacted] described the object's maneuvers as being a perfect interceptor pass. The attached 'Winds Aloft Computation Chart' indicates the course of the object, as outlined in ink. It will be noted that the object was last known to be heading towards the shore line in a direction that would permit it to pass over Salem, Mass. In connection with the 'Winds Aloft Computation Chart', the following information was given by LIGDA concerning his observations, as related to this chart:

- "1. Object first detected at about point A when F-86's were about at A, on converging course and rapidly overtaking F-86's.
2. Object crossed track of F-86's about two miles ahead of them, about at point B.
3. Object continued out to north, then began a turn to right crossing directly over or under F-86's at C and headed in toward Boston.

CERTAIN FEATURES

1. Crossing point at B was $2\frac{1}{2}$ miles ahead of F-86's.
2. Turn of object was to the right.
3. Object did not go over 39 miles (did not cross 40 mile range marker) from MIT.

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(CONTINUE ON OTHER SIDE)

ROUTING AND RECC SHEET

AIR ERIEL COMMAND

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SUBJECT Sighting of Unidentified Airborne Object

1D-OSI 24-

TO District Commander FROM Detachment Commander DATE 3 Oct 50 COMMENT NO. 1
1st District OSI (IC) Detachment "B" (Cont'd)

"4. Object passed directly over or under F-86's (echoes merged on both R and PPI scopes).

5. Object was not a hydrometeor of any sort--gave steady, solid echo of moderate strength.

UNCERTAIN FACTORS

1. Time between B and C believed to be about one minute and fifteen seconds (assumed 1 minute).
2. Radius of turn may be somewhat larger or smaller, but not appreciably.
3. Exact azimuths of points B and C may be $\angle 10^\circ$.

4. [REDACTED] advised that he was in touch with the pilots of the F-86 aircraft by VHF radio during the period the unidentified object appeared on the radar scope, and was later advised by the pilots that they had not seen the object. The following information pertains to the F-86 aircraft at approximately the time the unidentified object was sighted:

Run #/3 Pressure altitude 30,000 ft.

Free Air Temp. - 20°C.

Indicated Air Speed, 250 MPH.

Corrected Air Speed, 420 MPH.

Time of Run, 537.6 seconds = .149 hr.

Length of Run, 62.5 Miles.

True Ground Speed, 419 MPH.

Compass Course 333°

Magnetic Course 330°

Corrected Course 314°

True Course 329°

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ROUTING AND RECC

SHEET

AIR

ERIEL COMMAND

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SUBJECT Sighting of Unidentified Airborne Object

1D-OSI 24-

TO District Commander
1st District OSI (IG)FROM Detachment Commander
Detachment "B"

DATE 3 Oct 50

COMMENT NO. 1
(Cont'd)

5. [REDACTED] 1007 [REDACTED] Street, Brockton, Mass., who is an Analyst at the Weather Radar Project at Massachusetts Institute of Technology, and [REDACTED] [REDACTED] Dorchester, Mass., an Electronics Technician with the same project, were with [REDACTED] at the time the object was sighted and could add nothing to the information furnished by [REDACTED]. Both [REDACTED] advised that they had actually seen the object in the radar scopes and could verify [REDACTED]'s statements.

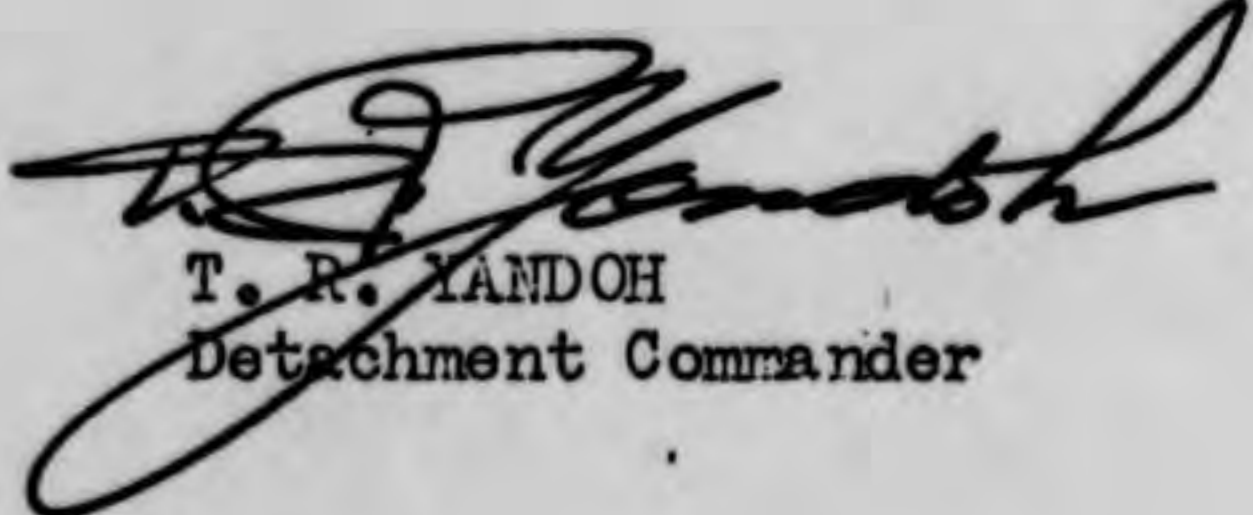
6. The names of the pilots flying the mission were not known.

7. [REDACTED] advised that he had discussed with TUTTLE the possibility of running a similar mission in the near future in an attempt to gather additional data in the event the unidentified object should reappear. LIGDA regretted very sincerely his failure to use motion picture cameras that may be operated in conjunction with the radar set.

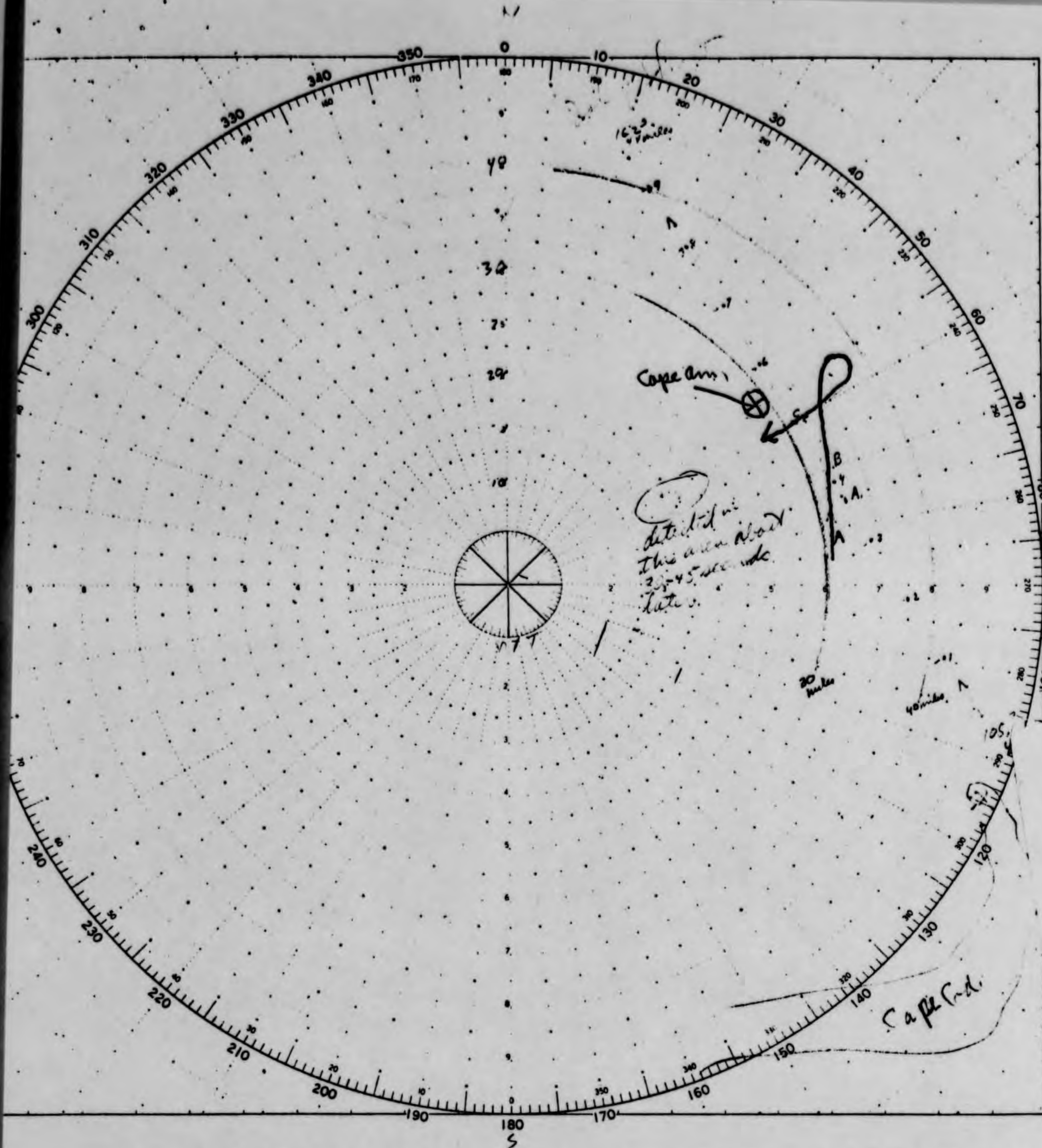
8. It was apparent to the undersigned that many people at Massachusetts Institute of Technology are familiar with this sighting and, as a result, an account of it may eventually appear in the newspapers.

Incl:

Winds Aloft Computation Chart


T. R. YANDOH
Detachment Commander

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WINDS ALOFT COMPUTATION CHART

MIT
Sept 21, 1950
0945

Pressure Change (in tenths mb.)

Surface _____

Diurnal _____

Advective _____

$\frac{\partial \Delta P}{\partial t} = k C_N C_T \times 10^{-3}$	C_N	C_T	$C_N C_T$
$k =$ _____			
$k \Sigma C_N C_T \times 10^{-3} =$ _____			
	$\Sigma C_N C_T =$ _____		

Isotherm

AF234896